



# RTM

**NINGBO REFRIGERATION TOOL MANUFACTURING CO.,LTD**

**TEL:** 0086-574-27866850,27866853,83869326

**FAX:**0086-574-27866851

**ADD:** WAN TAI INDUSTRIAL ZONE,SHI PU,NINGBO,CHINA

**POST CODE:**315731

**Email:** info@retoent.com

**Website:** www.retoent.com

# RTM

Refrigeration Tool  
Manufacturing



• **WELDING TOOLS**  
• **TUBING TOOLS**

• **CHARGING & RECOVERY**  
• **TEST INSTRUMENTS**

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*RTM company has been a leading supplier of soldering, brazing and welding equipment to the HVAC and plumbing industry. For over ten years, the RTM name has been synonymous with professional, reliability and craftsmanship.*

*The success of RTM can be attributed to a basic philosophy of providing our customers with the very best our industry has to offer. This includes the best service, the best products and most importantly the best overall quality.*

*RTM company is proud of the achievements and continues to provide not only the tools to get the job done, but the confidence to know it will get done right. Whether you've been around as long as we have or you're still breaking in your first tool belt, you know you can trust RTM tools every time. Isn't it nice to have tools that work as hard as you do?*



### WELDING TOOLS

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### TEST INSTRUMENTS

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## Self Lighting Brazing Torch RTM-027

### PRODUCT DESCRIPTION

Quick Self- Lighting  
 Brazes / Solders  
 Swirl flame, Variable flame control  
 Tip swivels 360 degree  
 Generates more heat than other hand torches  
 Faster brazing times and less gas consumption  
 4-interlocking safety button, reliable to use  
 Comfortable handling  
 Long service life  
 Designed for Propane or MAPP

### PRODUCT APPLICATION

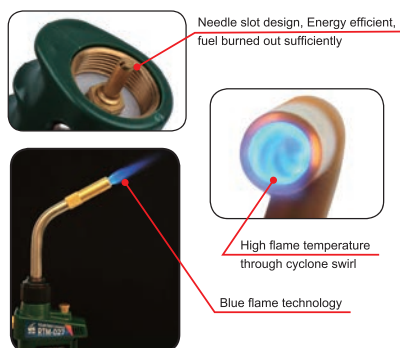
For soldering and brazing.  
 Applying in the field of Chemical, Refrigeration,  
 Household electric appliance and Jewelcrafting.

### PRODUCT SPECIFICATION

Model	QTY/CTN (PCS)	G.W.(KGS)	N.W.(KGS)	CTN Size(CM)
RTM-027	20	14.5	13.6	58x36.5x35.5
RTM-030	20	11.8	11.4	43x35x35



RTM-027



RTM-027



RTM-030

## Brazing Torch RTM-1S

### PRODUCT DESCRIPTION

Quick Self- Lighting  
 Brazes / Solders  
 Swirl flame  
 Tip swivels 360 degree  
 Precise flame adjustment  
 Faster brazing times and less gas consumption  
 Long service life  
 CGA600 connection  
 Designed for Propane or MAPP

### PRODUCT APPLICATION

For soldering and brazing  
 Using Mapp gas, propane, MAP/Pro, Propylene liquefied petroleum gas  
 as gas source. Widely used in air-conditioning installation&maintenance,  
 refrigerator maintenance

### PRODUCT SPECIFICATION

Model	QTY/CTN (PCS)	G.W.(KGS)	N.W.(KGS)	CTN Size(CM)
RTM-1S	20	13.5	12.6	58x36.5x35.5
RTM-1S6	20	11	10.4	46x37x18.5
RTM-1S7	20	10.4	9.5	46x37x18.5



RTM-1S



RTM-1S6



RTM-1S7

## HIGH PERFORMANCE DUAL HAND TORCH RTM-2

### PRODUCT DESCRIPTION

Hand-lighting, wide range of temperature control, rapid temperature rising, the instantaneous welding/brazing temperature can reach 1400 degrees Celsius.

Dual tips and more efficient flame, particularly suitable for welding the big size of work piece or hot processing of metal . Tip swivels 360°.

Using a single industrial gas MAPP Gas or Propane, and the design of combustion-supporting of the oxygen of air.

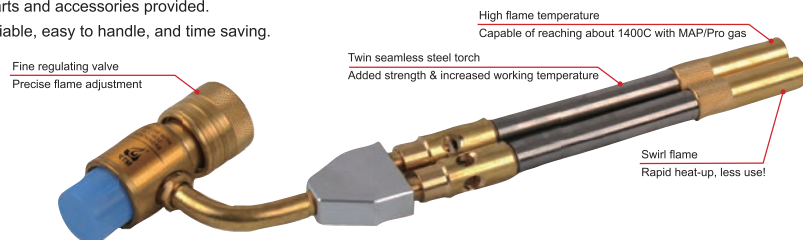
Being portable, the G.W.of the MAPP gas is 890G, RTM-2 is 550G.

The full burning time of a bottle of MAPP gas: nearly 2hours.

Low in fuel consumption,long service life, simple to disassemble and easy to maintain.

spare parts and accessories provided.

Safe, reliable, easy to handle, and time saving.



### PRODUCT APPLICATION

For soldering and brazing.

Suitable for welding copper pipes, aluminum tubes, and copper pipes with aluminum tubes in refrigeration field, High & low voltage electricity, Express highway, Fridge, Air-condition, Hardware, Maintenance of equipment, and etc.

### PRODUCT SPECIFICATION

Model	QTY/CTN (PCS)	G.W.(KGS)	N.W.(KGS)	CTN Size(CM)
RTM-2	20	15.1	14.2	58x36.5x35.5
RTM-26D	20	13.3	12.4	45x35x21.5
RTM-27D	20	11	10.1	45x35x21.5



RTM-2



RTM-26D



RTM-27D

## HAND TORCH RTM-1

### PRODUCT DESCRIPTION

Safe, reliable, easy to handle.

Hand-lighting, wide range of temperature control, rapid temperature rising, the instantaneous welding/brazing temperature can reach 1400 degrees Celsius.

Tip swivels 360°.

Using a single industrial gas MAPP Gas or Propane, and the design of combustion-supporting of the oxygen of air.

Being portable, the G.W.of the MAPP gas is 890G, RTM-1 is 430G.

The full burning time of a bottle of MAPP gas: nearly 2hours and 40mins.

Low in fuel consumption , long lasting service life.

Simple to disassemble and easy to maintain, spare parts and accessories provided.



### PRODUCT APPLICATION

For soldering and brazing.

Suitable for welding copper pipes, aluminum tubes, and copper pipes with aluminum tubes in refrigeration field, High & low voltage electricity, Express highway, Fridge, Air-condition, Hardware, Maintenance of equipment, and etc.

### PRODUCT SPECIFICATION

Model	QTY/CTN (PCS)	G.W.(KGS)	N.W.(KGS)	CTN Size(CM)
RTM-1	20	12.7	11.8	58x36.5x35.5
RTM-16	20	10	9.1	45x35x18
RTM-17	20	7.7	6.8	45x35x18



RTM-1



RTM-16



RTM-17



**DELUXE SELF-LIGHTING SNAKE TORCH****RTM-1S660T**

Deluxe components to meet High-end customers' needs.

**DESCRIPTION**

Self ignition

Brass regulator, Durable, CGA600 connection with cylinder, (3/8)"-24UNF connection with hose

Safe, Reliable

Tip swivels 360 degree, suitable for a variety of complex environment

Quick disconnect fitting for speed and ease of changing tips

Double regulators easy to use, Hand wheel with positive on/off valve

Tips available in 3 sizes to meet welding needs

1.5meters Propane/MAPP hose with 9/16"18-thread LH nuts, The length of the hose to be adjusted according to customers' requirement

Cylinder size: 14.1 - 16oz with CGA600 connection

Operates on LPG, MPS, MAPP, Propane, Propylene gases

Suitable for commercial, HVAC industrial, and home use. For soft soldering and brazing of copper, brass, bronze and aluminum. Optional accessories available

**DELUXE SERIES**

ITEM	IGNITION	REGULATOR	HANDLE	TIPS OPTIONAL
RTM-1S660T	Self lighting	Brass body, Disassemble	Quick disconnect fitting, Hand wheel	T-1S4(T-1S3, T-1S5)
RTM-1S760T	Self lighting	Aluminium body, Disassemble	Quick disconnect fitting, Hand wheel	T-1S4(T-1S3, T-1S5)
RTM-1660T	Manual lighting	Brass body, Disassemble	Quick disconnect fitting, Hand wheel	T-14(T-13, T-15)
RTM-1760T	Manual lighting	Aluminium body, Disassemble	Quick disconnect fitting, Hand wheel	T-14(T-13, T-15)

**S3 SELF-LIGHTING SNAKE TORCH****RTM-3660T**

S3 series include exclusive technical : Speed+Smart+Safe

**DESCRIPTION**

Brass regulator, Durable, CGA600 connection with cylinder, (3/8)"-24UNF connection with hose

Continuous self ignition

Three safety interlocking, more reliable to use

Double regulators easy to use

Tip swivels 360 degree, suitable for a variety of complex environment

Swirl flame tips for maximum heat, the instantaneous welding/brazing temperature can reach 1400 degrees Celsius

Screw connect handle and tips, different types of tips to meet welding needs

1.5meters Propane/MAPP hose with 3/8"-24UNF thread. The length of the hose to be adjusted according to customers' requirement

Operates on LPG, MPS, MAPP, Propane, Propylene gases

Suitable for commercial, HVAC industrial, and home use. For soft soldering and brazing of copper, brass, bronze and aluminum

**S3 SERIES**

ITEM	IGNITION	REGULATOR	HANDLE	TIPS OPTIONAL
RTM-3660T	Self lighting	Brass body, Disassemble	Multi	Standard tip (T-33, T-34)
RTM-3760T	Self lighting	Aluminium body, Disassemble	Multi	Standard tip (T-33, T-34)
RTM-3660	Self lighting	Brass body	Multi	Standard tip (T-33, T-34)
RTM-3760	Self lighting	Aluminium body	Multi	Standard tip (T-33, T-34)

**CLASSIC SNAKE TORCH****RTM-1660**

Classic series cost-effective, durable, suitable for entry-level users to buy.

**DESCRIPTION**

Screw connect handle and eight tips, Quick and easy to assemble and change tips, The eight most versatile tips made from all brass and stainless construction

Swirl flame tips for maximum heat, the instantaneous welding/brazing temperature can reach 1400 degrees Celsius

Safe, Reliable

1.5meters Propane/MAPP hose. The length of the hose to be adjusted according to customers' requirement

Operates on LPG, MPS, MAPP, Propane, Propylene gases

Suitable for welding copper pipes, aluminum tubes, and copper pipes with aluminum tubes in refrigeration field, High & low voltage electricity, Express highway, Fridge, Air-condition, Hardware, Maintenance of equipment, and etc

**CLASSIC SERIES**

ITEM	IGNITION WAY	REGULATOR	HANDLE	TIPS OPTIONAL
RTM-1S660	Self lighting	Brass body	Screw connct handle and tip	Standard tip (E-1S3, E-1S4, E-1S5)
RTM-1S760	Self lighting	Aluminium body	Screw connct handle and tip	Standard tip (E-1S3, E-1S4, E-1S5)
RTM-1660	Manual lighting	Brass body	Screw connct handle and tip	Standard tip (E-13, E-14, E-15)
RTM-1760	Manual lighting	Aluminium body	Screw connct handle and tip	Standard tip (E-13, E-14, E-15)
RTM-26D60	Manual lighting	Brass body	Screw connct handle and tips	-
RTM-27D60	Manual lighting	Aluminium body	Screw connct handle and tips	-

**REMOTE WELDING TORCH****RTM-AB1SE**

Remote series suitable for heavy industrial especially.

**DESCRIPTION**

Self ignition

Brass regulator, Durable, CGA510 connection with cylinder, (9/16)"-18- thread with hose

Safe, Reliable

Tip swivels 360 degree, suitable for a variety of complex environment

Quick disconnect fitting for speed and ease of changing tips

Double regulators easy to use, Hand wheel with positive on/off valve

Tips available in 3 sizes

3.8meters Propane/MAPP hose with 9/16"18-thread LH nuts,

The length of the hose to be adjusted according to customers' requirement

Operates on LPG, MPS, MAPP, Propane, Propylene gases

Suitable for heavy industrial, commercial, and home use.

For soft soldering and brazing of copper, brass,

bronze and aluminum. Optional accessories available

**REMOTE SERIES**

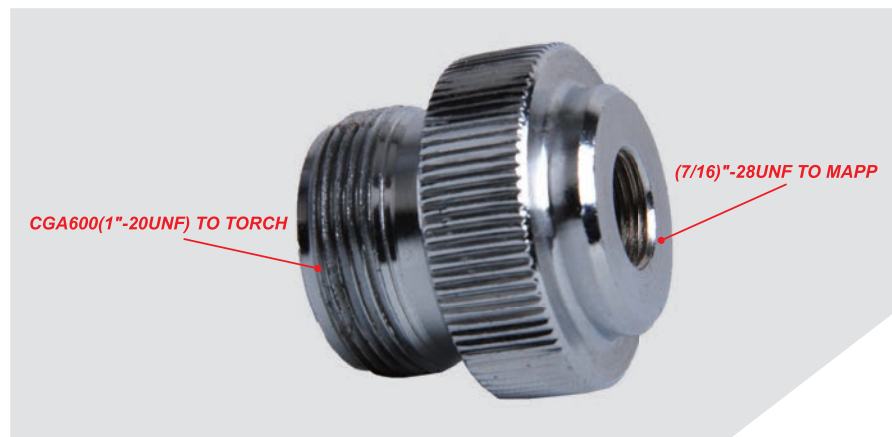
ITEM	IGNITION WAY	REGULATOR	HANDLE	TIPS OPTIONAL
RTM-AB1SE	Self lighting	Brass body, Disassemble	Quick disconnect fitting, Hand wheel	T-1S4(T-1S3, T-1S5)
RTM-AB1E	Manual lighting	Brass body, Disassemble	Quick disconnect fitting, Hand wheel	T-14(T-13, T-15)

## ADAPTOR

## LP-F

## DESCRIPTION

Screw connect MAPP cylinder(7/16)"-28UNF and Torch CGA600(1"-20UNF) thread.



## ACCESSORIES &amp; PARTS



## LIQUEFIED PETROLEUM GAS AND METHYL ACETYLENE-PROPADIENE MIXTURE

### PRODUCT DESCRIPTION

Burning temperature: approach to 3600°F

The full burning time for one full bottle: nearly 2 hours and 40 mins

Scientific gas mix and high flame temperature,

utmost burning performance and guaranteed short working times

Increased user safety through improved cartridge valve

Pressure(psig)110 psig at temperature 20°C

CGA600 connection

Portable for using and longer periods of use.

- Special gas mixture with outstanding flame performance
- CGA600 valve connection  
Suitable for most torches in the market
- Quality disposable steel cylinder  
Tough and impact resistant
- Burns approx. 1/3 longer than propane  
up to 2.5 hours of use
- CE tested gas cartridge  
Increased safety for the user.

### PRODUCT APPLICATION

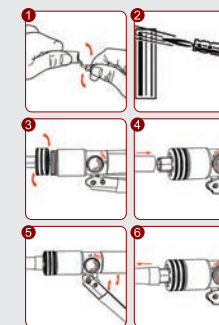
For soldering and brazing work

### PRODUCT SPECIFICATION

Model	N.W./CYL (G)	G.W./CYL (G)	QTY/CTN (CYLS)	CTN Size (MM)
Liquefied Petroleum Gas and Methyl Acetylene-Propadiene Mixture	453.6	890	12	460×160×280
	N.W./CTN	G.W./CTN	QTY per 20FT container (CYLS)	
	(KGS)	(KGS)	with pallets	without pallets
	5.44	11	11064	16500
Liquefied Petroleum Gas and Methyl ethylene, Propane	399.7	850	12	460×160×280
	N.W./CTN	G.W./CTN	QTY per 20FT container (CYLS)	
	(KGS)	(KGS)	with pallets	without pallets
	4.8	10.8	11064	16500



## HYDRAULIC TUBE EXPANDER



### SPARE EXPANDER HEADS

- Manual hydraulic mechanism designed can expand from 10mm to 42mm O.D. Tubing easily with less effort.
- Used for soft copper tube, Aluminum tube, Titanium tube, soft steel and other soft tube.
- Expander segments are made of high-quality hardened steel.

- Deburr inside of tube.
- Anneal the tube if necessary (for hard or thickwall tube).
- Screw the expander head on expander.
- Put the end of tube on expander head.
- Tighten the relief valve knob to 'On' position then pump handle until tube is expanded to the end.
- Turn the relief valve knob to 'OFF' position to loose expander head. Remove expanded tube.



### Spare Expander Heads

Item No	INCH	100A-08	For inch:1-1/4"	100M-04	For metric:19mm
100A-01	For inch:3/8"	100A-09	For inch:1-3/8"	100M-05	For metric:22mm
100A-02	For inch:1/2"	100A-10	For inch:1-1/2"	100M-06	For metric:25mm
100A-03	For inch:5/8"	100A-11	For inch:1-5/8"	100M-07	For metric:28mm
100A-04	For inch:3/4"	Item No	METRIC	100M-08	For metric:32mm
100A-05	For inch:7/8"	100M-01	For metric:10mm	100M-09	For metric:35mm
100A-06	For inch:1"	100M-02	For metric:12mm	100M-10	For metric:38mm
100A-07	For inch:1-1/8"	100M-03	For metric:16mm	100M-11	For metric:42mm



CT-300AL



CT-300A

Item No.	DESCRIPTION	
CT-300AL NEW	CT-300A+CT-312+CT-209+CT-207	For inch: 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/8" O.D. Tubing. Any 3 sizes of these 5 expander heads are optional: 1-1/4", 1-3/8", 1-1/2", 1-5/8", O.D. tubing.
CT-300ML NEW	CT-300M+CT-312+CT-209+CT-207	For Metric: 10,12,16,19,22,25,28mm O.D. Tubing. Any 3 sizes of these 6 expander heads are optional: 32,35,38, 42mm O.D. Tubing.
CT-300A Normal	CT-300A+CT-312+CT-208	For inch: 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/8" O.D. Tubing
CT-300M Normal	CT-300M+CT-312+CT-208	For Metric: 10,12,16,19,22,25,28mm O.D. Tubing.



## LEVER TUBE EXPANDING TOOL KIT

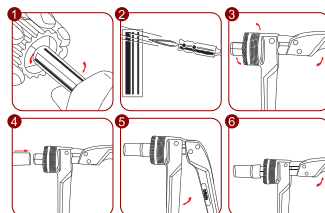


### SIX EASY STEPS:

- Deburr inside of tube.
- To create perfectly expanded tubing for soldering or brazing, you must use soft copper or fully anneal end of tube to be expanded.
- Pull XpandR. Handle up to 90-degree position. Maintain this position as you screw the appropriate size head over the center-punch and tighten.
- Insert the end of the tube over the XpandR. Head completely.
- Pull the lever completely down.
- Return the lever to the 90-degree position. Remove expanded tube.

### CT-100A/CT-100M SWAGING/EXPANDING KIT

- Hand-operated, single-stage expander is designed to expand tubing for fast, accurate joints in soft copper, aluminium, and soft steel tube without using fittings.
- Free-floating and self-centering expander mechanism.
- Expander segments are made from high-quality hardened steel.



Normal CT-100A/CT-100M

Item No.	DESCRIPTION			
CT-100A	Normal	CT-100A+CT-312+CT-208	For inch: 3/8" , 1/2" , 5/8" , 3/4" , 7/8" , 1" , 1-1/8" O.D.Tubing	
CT-100M	Normal	CT-100M+CT-312+CT-208	For Metric: 10,12,16,19,22,25,28mm O.D.Tubing.	

## CORDLESS EXPANDER TOOL



CT-E600A/E600M



CT-E600AL/E600ML

### INTRODUCTION

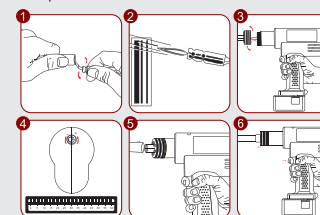
The CT-E600A / E600M are high- tech products specially designed flaring tools for HVACR field use. With high capacity charging batteries, they can flare different sizes of brass, aluminum, PVC tubings. Features of auto alarm, auto retract function etc. This new flaring tools can provide convenient, prompt, easy operation service for your work.

### FEATURES:

- High capacity provide driving power.
- Adjustable inside punch for different depth & sizes
- Auto retract expander heads with alarm functions
- Different sizes of expander heads available.
- Easy operation, used for 10mm~42mm. Diameter tubings.

### CORDLESS EXPANDER TOOL OPERATION GUIDE:

1. Deburr inside of tubings.
2. Anneal tubings if necessary (for hard or thick wall tubings).
3. Screw expander head on expander tool.
4. Adjust the length of expander tool punch (rotate clockwise /anti-clockwise to reduce / increase the length).
5. Place the end of tubings on expander head.
6. Press and hold switch until tubings had been expanded. Work complete.



### Spare Expander Heads

Item No	INCH	E600A-08	For inch:1-1/4"	E600M-04	For metric:19mm
E600A-01	For inch:3/8"	E600A-09	For inch:1-3/8"	E600M-05	For metric:22mm
E600A-02	For inch:1/2"	E600A-10	For inch:1-1/2"	E600M-06	For metric:25mm
E600A-03	For inch:5/8"	E600A-11	For inch:1-5/8"	E600M-07	For metric:28mm
E600A-04	For inch:3/4"	Item No	METRIC	E600M-08	For metric:32mm
E600A-05	For inch:7/8"	E600M-01	For metric:10mm	E600M-09	For metric:35mm
E600A-06	For inch:1"	E600M-02	For metric:12mm	E600M-10	For metric:38mm
E600A-07	For inch:1-1/8"	E600M-03	For metric:16mm	E600M-11	For metric:42mm



EXPANDER HEADS



## CORDLESS ECCENTRIC CONE FLARING TOOL



CT-E800

### SPECIFICATION:

- 9.6V DC
- Cone speed: 280rpm
- Applicable pipe size:  
1/4", 5/16", 3/8", 1/2", 5/8", 3/4"
- BMC Size(1pc): 37 × 33 × 11cm
- Carton Dimension (4pcs):  
45 × 38 × 35cm
- 20ft Container Capacity: 1920pcs
- Standard Accessories:
- Cutter: 1pc
- Scraper: 1pc
- Stopper plate: 3pcs

### INTRODUCTION

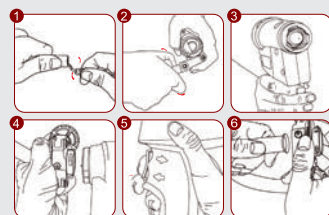
The CT-E800 cordless eccentric cone flaring tool is our new high capability product. Cordless, battery power. This product can be used for 1/4" ~3/4" (6mm~19mm) tubing. Special eccentric cone structure make smooth and uniform sizes 45 degree flares. Eccentric cone rebound automatically when work finished.

### FEATURES:

- Cordless tool: easy to carry
- Battery power: save energy and work faster than manual tool.
- Human engineering design body shell: comfort to grasp and use.
- Eccentric cone structure: make perfect 45 degree flares without scratches.

### CORDLESS FLARING TOOL OPERATION GUIDE:

1. Deburr inside of tubings.
2. Choose flare clip accordingly to fasten the tubings.
3. Press '→' switch to the end.
4. Connect flare clip with flaring tool.
5. Press '←' until flare work complet, press '→' to the end.
6. Take off clip from flaring tool and separate flare clip with tubings.



SPARE EXPANDER HEADS

Item No.	Description	Item No.	Description
E800A-01	For inch:1/4"	E800M-01	For metric:6mm
E800A-02	For inch:5/16"	E800M-02	For metric:8mm
E800A-03	For inch:3/8"	E800M-03	For metric:10mm
E800A-04	For inch:1/2"	E800M-04	For metric:12mm
E800A-05	For inch:5/8"	E800M-05	For metric:16mm
E800A-06	For inch:3/4"	E800M-06	For metric:19mm

## 90° MULTI BENDER KIT



CT-999R

CT-999

### FEATURES

Designed to bend soft copper and coated soft copper of 6mm to 22mm as well as Mepla multilayer pipe up to 26mm. Unique sliding mechanism places formers quickly in correct tube diameter position.

### UNIVERSAL USE

For sanitary, heating, air conditioning, refrigerating and hydraulic applications. Also for copper thin-walled heating tubes according to DIN EN 1057 and for tubes of pressfitting systems.

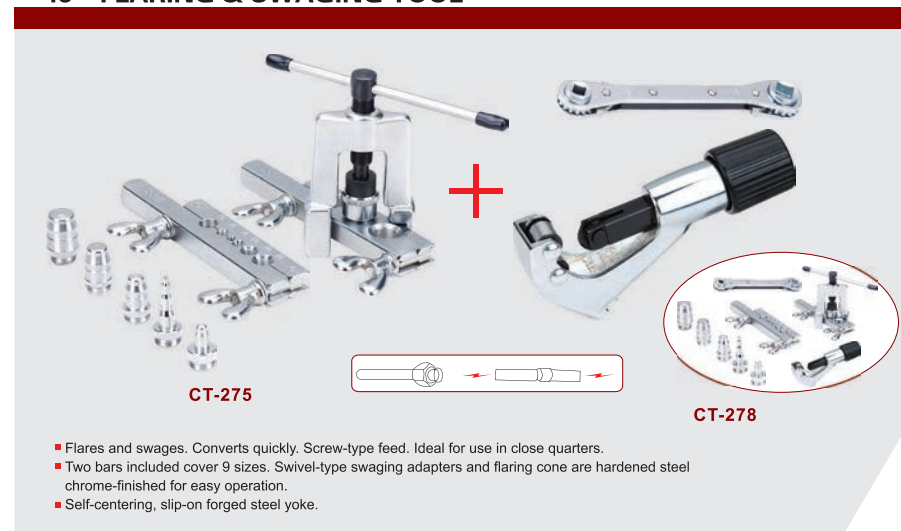
### COST ADVANTAGE

Bender recovered after a few bends through savings on fittings. No costs for fittings, storage, procurement. Savings in soldering joints, pressing joints and working hours. Higher safety thanks to fewer pipe joints.

### PRACTICAL TOOL FOR EXACT TUBE BENDING UP TO 90°

Item No.	DESCRIPTION	
CT-999	CT-999+CT-312+CT-209	For inch: 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 7/8" O.D. Tubing. For Metric: 6,8,10,12,16,19,22mm O.D. Tubing.
CT-999R	CT-999L+CT-312+CT-209	For inch: 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 7/8" O.D. Tubing. For Metric: 6,8,10,12,16,19,22mm O.D. Tubing.
CT-999F	CT-999+CT-312+CT-209	For inch: 3/8", 1/2", 5/8", 3/4", 7/8" O.D. Tubing. For Metric: 10,12,16,19,22mm O.D. Tubing.
CT-999RF	CT-999L+CT-312+CT-209	For inch: 3/8", 1/2", 5/8", 3/4", 7/8" O.D. Tubing. For Metric: 10,12,16,19,22mm O.D. Tubing.

## 45° FLARING &amp; SWAGING TOOL



## 45° Flaring &amp; Swaging Tool KIT



CT-275L / CT-2000AM

CT-278L

CT-1226-AL

Item No.	DESCRIPTION	
<b>CT-275L</b>	Flaring Tool	For 1/8" , 3/16" , 1/4" , 5/16" , 3/8" , 7/16" , 1/2" , 5/8" & 3/4" O.D. Includes 5 swage adapters that swage 7 tube sizes 3/16" , 1/4" , 5/16" , 3/8" , 1/2" , 5/8" , 3/4" O.D.
<b>CT-2000AM</b>	Flaring Tool	For 3/16" , 1/4" , 5/16" , 3/8" , 7/16" , 1/2" , 5/8" & 3/4" O.D. Includes 6mm,8mm,10mm,12mm,16mm & 19mm O.D.
<b>CT-278L</b>	Flaring Tool	For 1/8" , 3/16" , 1/4" , 5/16" , 3/8" , 7/16" , 1/2" , 5/8" and 3/4" O.D. Includes 5 swage adapters that swage 7 tube sizes 3/16" , 1/4" , 5/16" , 3/8" , 1/2" , 5/8" , 3/4" O.D. CT-274 Tube Cutter For 1/8" ~1-1/8" (3-28mm) CT-122 Ratchet Wrench For 1/4" , 3/8" , 3/16" , 5/16"
<b>CT-1226-AL</b>	Flaring Tool	CT-195 Common Extrusion Flaring Tool. For 3/16" , 1/4" , 5/16" , 3/8" , 7/16" , 1/2" & 5/8" O.D. Tubing. CT-274 Tube Cutter 1/8" ~1-1/8" (3-28mm) Packed In Hand Carrying Plastic Case.

## 45° ECCENTRIC CONE TYPE FLARING TOOLS

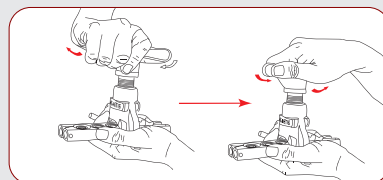


Item No.	DESCRIPTION	
<b>CT-806A</b>	For inch: 1/4" , 5/16" , 3/8" , 1/2" , 5/8" & 3/4" O.D. Tubing	individual packed in color box.
<b>CT-806M</b>	For metric: 6mm, 8mm, 10mm, 12mm, 16mm & 19mm O.D. Tubing	individual packed in color box.
<b>CT-808A</b>	For inch: 3/16" , 1/4" , 5/16" , 3/8" , 1/2" , 5/8" & 3/4" O.D. Tubing	individual packed in color box.
<b>CT-808M</b>	For metric: 5mm, 6mm, 8mm, 10mm, 12mm, 16mm & 19mm O.D. Tubing	individual packed in color box.
<b>CT-806A-L</b> <b>CT-806M-L</b>	CT-806A+CT-274+CT-208 (packed in hand carrying plastic case)	For inch: 1/4" , 5/16" , 3/8" , 1/2" , 5/8" & 3/4" O.D. Tubing For metric: 6mm, 8mm, 10mm, 12mm, 16mm & 19mm O.D. Tubing
<b>CT-808A-L</b> <b>CT-808M-L</b>	CT-808A+CT-274+CT-208 (packed in hand carrying plastic case)	For inch: 3/16" , 1/4" , 5/16" , 3/8" , 1/2" , 5/8" & 3/4" O.D. Tubing For metric: 5mm, 6mm, 8mm, 10mm, 12mm, 16mm & 19mm O.D. Tubing
<b>CT-806AM-L</b>	CT-806A+CT-274+CT-208 (packed in hand carrying plastic case)	For inch: 1/4" , 5/16" , 3/8" , 1/2" , 5/8" , 3/4" & 6mm, 8mm, 10mm, 12mm, 16mm , 19mm O.D. Tubing)
<b>CT-808AM-L</b>	CT-808A+CT-274+CT-208 (packed in hand carrying plastic case)	For inch: 3/16" , 1/4" , 5/16" , 3/8" , 1/2" , 5/8" , 3/4" & 5mm, 6mm, 8mm, 10mm, 12mm, 16mm , 19mm O.D. Tubing)

## RATCHET ECCENTRIC CONE TYPE FLARING TOOL



- This precision tool provides smooth, uniform flares with minimum effort.
- The new ratcheting feed screw handle turns easily and requires less motion and effort than a standard handle. Hand need not leave the handle to complete the flare work. More convenient to operate.
- Hardened steel flaring cone, eccentrically mounted in needle bearings, produces rolling action for even metal flow, giving uniform flare walls without galling.



Item No.	DESCRIPTION	
RCT-806A	For inch: 1/4", 5/16", 3/8", 1/2", 5/8" & 3/4" O.D. Tubing Individual packed in color box.	
RCT-806M	For metric: 6mm, 8mm, 10mm, 12mm, 16mm & 19mm O.D. Tubing Individual packed in color box.	
RCT-808A	For inch: 3/16", 1/4", 5/16", 3/8", 1/2", 5/8" & 3/4" O.D. Tubing individual packed in color box.	
RCT-808M	For metric: 5mm, 6mm, 8mm, 10mm, 12mm, 16mm & 19mm O.D. Tubing Individual packed in color box.	
RCT-806AM-L	CT-806A+CT-274+CT-208 (Packed in hand carrying plastic case)	For inch: 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" & 6mm, 8mm, 10mm, 12mm, 16mm, 19mm O.D. Tubing
RCT-808AM-L	CT-808A+CT-274+CT-208 (Packed in hand carrying plastic case)	For inch: 3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" & 5mm, 6mm, 8mm, 10mm, 12mm, 16mm, 19mm O.D. Tubing

## ECCENTRIC CONE TYPE FLARING TOOLS



CT-195



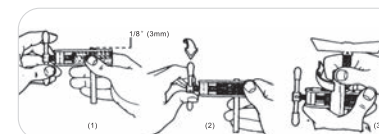
CT-103



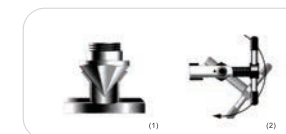
CT-525-F



CT-500-A



- ★ Insert tubing into adjustable opening of tube holding assembly. Position end of tubing approximately 1/8" above the surface of holder.
- ★ Tighten clamp screw approximately 1/2 to 3/4 of a turn beyond free travel position to secure tubing.
- ★ Be certain flaring cone surface is oiled. Slip yoke over tube holding assembly centering on tubing. Twist yoke clockwise to lock in position. Turn yoke handle clockwise to flare.



1. Flares rolled out above die bar by super-smooth faceted cone. Makes stronger flares.
2. Unique detention mechanism for rapid engagement and release of die blocks.

For use with soft copper, aluminum and brass tubing. Faceted, hard chrome-finished cone rolls out perfect 45° flares above die block-then automatically burnishes flare face. Original wall thickness is maintained at base of flare. New slip-on yoke permits use in tight quarters where there is little space between nut and tube end. Larger handle, with better leverage, and precision threads on feed screw make flaring effortless. Heat treated dies firmly grip tubing. Satin chrome and black finish.

Item No.	DESCRIPTION	
CT-195A CT-195M	45° Flaring Tool	For 3/16", 1/4", 5/16", 3/8", 7/16", 1/2" & 5/8" O.D. For 5mm, 6mm, 8mm, 10mm, 12mm, 14mm & 16mm O.D.
CT-103M	45° Flaring Tool	CT-103M: For 22mm, 25mm & 28mm O.D.
CT-525F	Grabber Flaring Tool	For 3/16" to 5/8" & 5mm to 16mm O.D.
CT-500A	Blocks Type Flaring Tool	For 3/16", 1/4", 5/16", 3/8", 1/2" & 5/8" O.D.



## LEVER TYPE TUBE BENDER



CT-365A/CT365M

**180° TUBE BENDER 2-IN-1**

CT-365-180° -A For 1/4" &amp; 5/16" size O.D. Tubing

CT-365-180° -M For 6mm &amp; 8mm size O.D. Tubing

- ★ Aluminum alloy body, Bend radius 15/16" (24mm).
- ★ Open size-slips on tubing at any point, can bend 0.4mm thin tube without distortion.
- ★ Calibrated markings for making accurate left-hand, right-hand, and offset bends 180° start requires less effort. Makes bending fast and easy.
- ★ Can be used for very thin tubing: 0.4mm.



CT-368A-90° /CT368M-90°

**90° TUBE BENDER 3-IN-1**

CT-368-90° -A For 1/4", 5/16" &amp; 3/8" size O.D. Tubing

CT-368-90° -M For 6mm, 8mm &amp; 10mm size O.D. Tubing

- ★ Aluminum alloy body, Bend radius 15/16" (24mm).
- ★ Open size-slips on tubing at any point, can bend 0.4mm thin tube without distortion.
- ★ Calibrated markings for making accurate left-hand, right-hand, and offset bends 90° start requires less effort. Makes bending fast and easy.



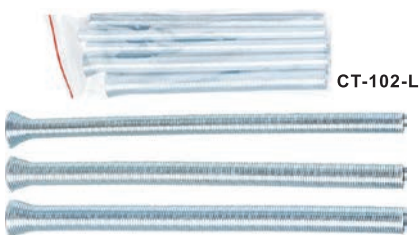
CT-368A-180° /CT368M-180°

**180° TUBE BENDER 3-IN-1**

CT-368-180° -A For 1/4", 5/16" &amp; 3/8" size O.D. Tubing

CT-368-180° -M For 6mm 8mm &amp; 10mm size O.D. Tubing

- ★ Aluminum alloy body, Bend radius 15/16" (24mm).
- ★ Open size-slips on tubing at any point, can bend 0.4mm thin tube without distortion.
- ★ Calibrated markings for making accurate left-hand, right-hand, and offset bends 180° start requires less effort. Makes bending fast and easy.



CT-102-L

**BENDER SPRING**

CT-102-L For Inch: 1/4", 5/16", 3/8", 1/2" &amp; 5/8" size O.D. Tubing

CT-102-04 For Inch: 1/4" O.D. Tubing

CT-102-06 For Inch: 3/8" O.D. Tubing

CT-102-08 For Inch: 1/2" O.D. Tubing

CT-102-10 For Inch: 5/8" O.D. Tubing

CT-102-12 For Inch: 3/4" O.D. Tubing

CT-102

## LEVER TYPE TUBE BENDER



CT-364-04/05



CT-364-06



CT-364-08



CT-364-10/12/14

- ★ Each tool bends one size.
- ★ For bending soft copper, brass, aluminium, steel, stainless steel and other very thinner metals.
- ★ Calibrated marking with red color to show angle of bend, Wide hook grips tugging securely.
- ★ Makes smooth short radius bends up to 180° with minimum effort, No marking, scraping or flattening of tubing.
- ★ New fixed hook tube benders furnished have easy 90° start-require much less effort to make fast, accurate bends.

**Tube Bender 180°**

Model No.	O.D. Tubing	Radius to center of tube
CT-364A-04	1/4"	14.2mm
CT-364A-05	5/16"	17.5mm
CT-364A-06	3/8"	23mm
CT-364A-08	1/2"	35.8mm
CT-364A-10	5/8"	54.4mm
CT-364A-12	3/4"	75.3mm
CT-364A-14	7/8"	82.1mm

**Tube Bender 180°**

Model No.	O.D. Tubing	Radius to center of tube
CT-364M-04	6mm	14.2mm
CT-364M-05	8mm	17.5mm
CT-364M-06	10mm	23mm
CT-364M-08	12mm	35.8mm
CT-364M-10	16mm	54.4mm
CT-364M-12	19mm	75.3mm
CT-364M-14	22mm	82.1mm

## PVC PIPE CUTTER

### RTM-PC-201



#### Ability of cut off:

Normal Pipe	VP30
Water course pipe	VW30
Electrical appliance pipe	VP 36

Scope of cut 42mm(1-5/8")

#### Attention

When product used in winter, the pipe would be put in the Lukewarm water for heating at first. To avoid burst because of cold and fragile at cutting. If the edge of a cutter appeared wear and tear at using. Loose the fixed screw and buy the same type of pipe blade for change after using, we should push down the handle and spread on rustproof oil. Product apply to rigid plastics pipe or Aluminum plastics pipe, but not to be applied on electric cable and steel pipe to avoid to cause cutter damaged seriously.



#### Use:

Apply to water pipe, aluminum, plastics pipe, gas pipe, electrical appliance pipe and other plastics pipeline. (Not to be applied on electrical cable and steel pipe).

#### SUBSTITUTE THE PIPE BLADE

When the blade is not very sharp, take down two pieces of fixed screw at two side of pipe blade to substitute for new pipe blade of the same type.

#### Package:

Model	SPEC(mm/inch)	QTY/CTN	G.W/N.T(kg)	CTN SIZE
RTM-PC-201	42(1-5/8")	50	18.5/17	68.5x28.5x29.5
RTM-PC-201A	42(1-5/8")	50	18.5/17	68.5x28.5x29.5
RTM-PC-203	36(1-3/8")	20	12.5/11.5	50.5x33.5x24

## RTM-PC-205



## Automatic PVC Pipe Cutter

### Tools For The Professional

Revoke Quickly Use For Convenient

#### Ability of cut off:

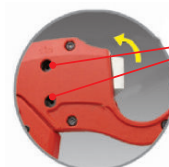
Normal Pipe	VP30	Scope of cut 42mm
Water course pipe	VW30	
Electrical appliance pipe	VP 36	

#### Use:

Apply to water pipe, aluminum plastics pipe, gas pipe, electrical appliance pipe and other plastics pipeline. (Not to be applied on electric cable and steel pipe)

#### Attention

When product used in winter, the pipe would be put in the Lukewarm water for heating at first. To avoid burst because of cold and fragile at cutting. If the edge of a cutter appeared wear and tear at using. Loose the fixed screw and buy the same type of pipe blade for change after using, we should push down the handle and spread on rustproof oil. Product apply to rigid plastics pipe or Aluminum plastics pipe, but not to be applied on electric cable and steel pipe to avoid to cause cutter damaged seriously.



#### SUBSTITUTE - The Pipe Blade.

When the blade is not very sharp, take down two pieces of fixed screw at two side of pipe blade to substitute for new pipe blade of the same type.

Particular design an acute angle knife. Quickly return button.

Model	SPEC(mm/inch)	QTY/CTN	G.W/N.T(kg)	CTN SIZE
RTM-PC-205	42mm/1-5/8"	20	16/15	65x40x24



## RTM-PC-208



### Tools For The Professional Revolve Quickly Use For Convenient

#### Use:

Apply to water pipe, aluminum, plastics pipe, gas pipe, electrical appliance pipe and other plastics pipeline. (Not to be applied on electric cable and steel pipe)

#### Ability of cut off:

Normal Pipe	VP30	
Water course pipe	VW30	Scope of cut 63mm
Electrical appliance pipe	VP 36	

#### Attention

When product used in winter, the pipe would be put in the Lukewarm water for heating at first. To avoid burst because of cold and fragile at cutting. If the edge of a cutter appeared wear and tear at using. Loose the fixed screw and buy the same type of pipe blade for change after using, we should push down the handle and spread on rustproof oil. Product apply to rigid plastics pipe or Aluminum plastics pipe, but not to be applied on electric cable and steel pipe to avoid to cause cutter damaged seriously.



#### SUBSTITUTE - The Pipe Blade.

When the blade is not very sharp, take down two pieces of fixed screw at two side of pipe blade to substitute for new pipe blade of the same type.

Model	SPEC(mm/inch)	QTY/CTN	G.W/N.T(kg)	CTN SIZE
RTM-PC-208	63mm / 2-1/2"	10	14.5/13	49x33x28.5
		20	29/27	55x49.5x33

## TUBE CUTTERS



RTM-213



Mode:RTM-213



Mode:RTM-214



Mode:RTM-215



RTM-215



RTM-214



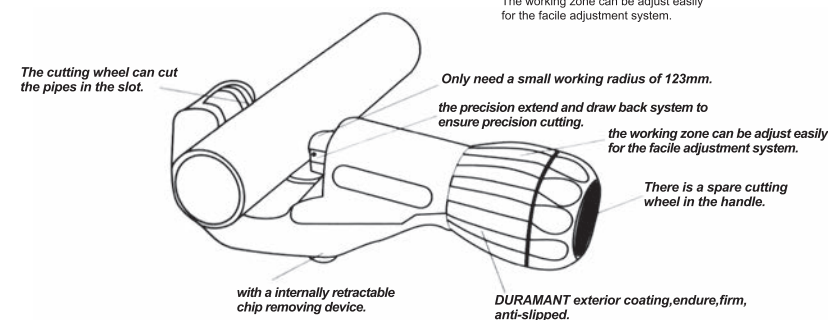
The cutting wheel can cut the pipes in the slot



The precision extend and draw back system to ensure precision cutting. The working zone can be adjust easily for the facile adjustment system.



With a internally retractable chip removing device



Model	SPEC(mm/inch)	QTY/CTN	G.W/N.T(kg)	CTN SIZE
RTM-213	38-67mm(1-1/2"-2-5/8")	20	17/16	40x31x38.5
RTM-214	50-127mm(2"-5")	10	20/19	46x52.5x21.5
RTM-215	100-168mm(4"-6-5/8")	10	22/21	51x43x26



RTM-221



#### Please black button to extend the diameter.

- 1) The cutter diameter may extend up to 67mm.
- 2) It's much easier to cutting all kinds of sizes in pipes.
- 3) press black button to extend the diameter

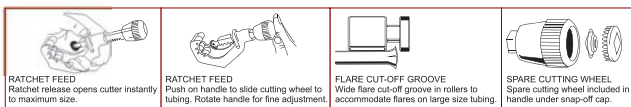
Model	SPEC(mm/inch)	QTY/CTN	G.W/N.T(kg)	CTN SIZE
RTM-221	6-67(1/4"- 2-5/8")	20	16.5/15.5	47x25x13.5

## TUBE CUTTERS

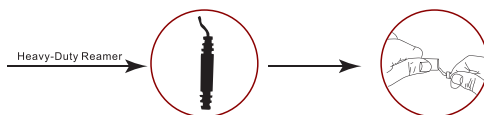


CT-206

1. Ratchet feed mechanism speeds up cutting operation.
2. Extra wide rollers with flare cut-off groove stabilize tubing.
3. Spare cutting wheel included under handle cap.
4. Light weight aluminum alloy body.



CT-109



- ★ Precision Feed Screw Mechanism can eliminate clogging and jamming.
- ★ Tube Cutter stays the same length for use in restricted areas.
- ★ Swivelled blade Deburring Tool for removing sharp edges from tubing.
- ★ Contoured knob holds Spare Cutter Wheel.
- ★ Rollers are grooved for cutting close to flared end of tubing.



CT-107

## 65 Mn Steel



CT-127-B



CT-274-B



CT-107-B

Item No.	DESCRIPTION		MATERIAL
CT-206	Heavy-Duty Cutter	For $\phi$ 3/8" to 2-5/8" (10-66mm)	Aluminum alloy body
CT-109	Heavy-Duty Cutter	For $\phi$ 5/16" to 1-5/8" (8-42mm)	Aluminum alloy body
CT-107	Heavy-Duty Cutter	For $\phi$ 1/4" to 2" (5-50mm)	Aluminum alloy body
CT-127-B	Cutting Blade	For CT-127/CT-128	65 Mn Steel
CT-274-B	Cutting Blade	For CT-274/105/G/312/174/109	65 Mn Steel
CT-107-B	Cutting Blade	For CT-107/206	65 Mn Steel

## TUBE CUTTERS



CT-127



CT-128



CT-174



CT-105



CT-G



CT-274



CT-312

- ★ Cutting copper, titanium, stainless steel and aluminum tubing.
- ★ Tube cutter stays the same length for use in restricted area.
- ★ Smooth groove in rollers can stabilize damaged flares and cut it easily.
- ★ Special 65Mn material blade, cut tubing more sharp and accurate
- ★ With a spare cutting blade.



FLARE CUT-OFF GROOVE  
Groove in rollers reduces tube loss when cracked flare is removed.

Item No.	DESCRIPTION		MATERIAL
CT-127	Mini Cutter	For $\phi$ 1/8" to 5/8" (3-16mm)	Zinc alloy body
CT-128	Mini Cutter	For $\phi$ 1/8" to 7/8" (3-22mm)	Zinc alloy body
CT-174	Mini Cutter	For $\phi$ 1/8" to 1-1/8" (3-28mm)	Aluminum alloy body
CT-105	Heavy-Duty Cutter	For $\phi$ 1/8" to 1-1/4" (3-32mm)	Aluminum alloy body
CT-G	Heavy-Duty Cutter	For $\phi$ 1/8" to 1-1/8" (3-30mm)	Aluminum alloy body
CT-274	Heavy-Duty Cutter	For $\phi$ 1/8" to 1-1/8" (3-28mm)	Aluminum alloy body
CT-312	Heavy-Duty Cutter	For $\phi$ 1/4" to 1-5/8" (7-42mm)	Aluminum alloy body

## SWAGING PUNCH



**CT-94**  
For 1/2" , 5/8" & 7/8" O.D. Tubing



**CT-95**  
For 1/4" , 5/16" , 3/8" , 1/2" & 5/8" O.D. Tubing



**CT-96**  
For 1/4" , 5/16" , 3/8" , 1/2" , 5/8" & 3/4" O.D. Tubing



**CT-193**  
For 1/4" , 5/16" , 3/8" , 1/2" & 5/8" O.D. Tubing

## Spanner for install &amp; take down Air Conditioner

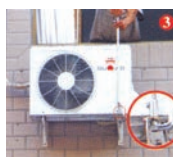


## Spanner For Install &amp; Take Down Air Conditioner User Guide:

1. Pull out the rotatable bar, a latch beside the handle can avoid the rotatable bar shrink automatically.
2. Put the screw, nut and gasket in two tube sheath (a magnet in tube sheath above which can catch up the screw and gasket).
3. Aim the spanner to the air-conditioner then screw hole in the corner, then rotate the rotatable bar it will shrink automatically. You can operate it now.

## NOTE:

1. Heated high strength tube sheath can screw out rusty screws and nuts.
2. The spring in the steel tube make the rotatable bar shrink automatically and impact the screw and nut. It will easier to operate.
3. This tool avoid danger from traditional operate method. The operation need not install or take down an air-conditioner climb outside a building, the work can be finished inside.



**CT-204**  
**Pinch-off Tool**  
In extra strong execution to pinch-off suction tubes on all hermetic refrigeration systems up to 3/8" diameter.



**CT-201**  
**7" Pinch off plier**  
Pinch of copper tubing up to 5/16" (8mm) constantly.



**PTC-01**  
**Capillary Tube Cutter**  
Cuts all sizes of capillary tubes without collapsing nor swaging the tubes.



**CT-208**  
**Inner-outer Reamer**  
Plastic body, 3/16" ~1-1/2" O.D. Tubing.  
Reams Both Inside and Outside Edges of Tubing.



**CT-209**  
**Inner-outer Reamer**  
Zinc Body, 1/4" ~1-5/8" O.D. Tubing.  
Reams Both Inside and Outside Edges of Tubing.



**CT-207**  
**Deburrer**  
Handy deburrer, Blade can be swivelled.



**CT-351**  
**Fin Straightener**  
For 8" , 9" , 10" , 12" , 14" , 15" Spacings per inch.



**CT-352**  
**Fin Straightener**  
For straightener stainless steel. Cleaning & straightening evaporator fin.



**CT-122**  
**Ratchet Wrench**  
4 Sizes: 1/4" , 3/8" , 3/16" , 5/16" square ratchet.



**CT-123L**  
**Ratchet Wrench**  
4 Sizes: 1/4" , 3/16" square, 9/16" , 1/2" hex ratchet.



**CT-503**  
**Pick up Tools**  
Length closed: 126mm  
Length open: 637mm



Inspect Mirror		
Item No.	CT-501	CT-502
Mirror O.D. (mm)	32	50
Length closed (mm)	127	200
Length open (mm)	500	410
Diameter (mm)	8	10



## CHARGING STATIONS



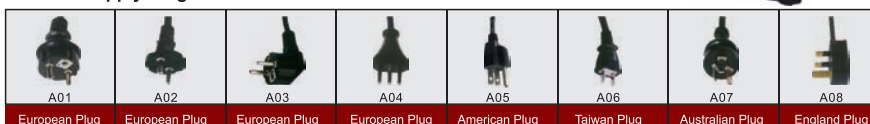
The unit consists of:  
 Vacuum pump  
 Vacuum gauge 80mm diameter  
 Manifold with hoses  
 Quick Couplers  
 Refrigerant Charging Scales

★ All above components adjustable according to customers' requirements



- ★ In order to meet air-conditioning installation, maintenance requirements.
- ★ Apply R410, R407C new refrigerant.
- ★ Inlet port installation of high-quality solenoid valve and vacuum gauge.
- ★ Vacuum gauge accurate vacuum pressure within the display system.
- ★ Power system automatically cut pumped.
- ★ Oil seal, Seal gasket, and others used special materials.
- ★ Use dual-exhaust structure, reached high ultimate vacuum.

## Power Supply Plugs

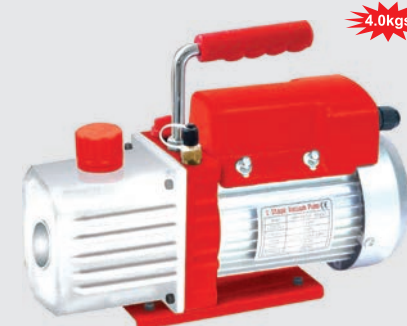


Model	2VP-1R				2VP-2 R				2VP-4R			
Voltage	220V/50Hz		110V/60Hz		220V/50Hz		110V/60Hz		220V/50Hz		110V/60Hz	
Free Air Displacement	2 CFM		2.5 CFM		4 CFM		5 CFM		8 CFM		9 CFM	
	0.97 l/s	58 l/min	1.2 l/s	72 l/min	1.9 l/s	115 l/min	2.36 l/s	142 l/min	3.3 l/s	198 l/min	4 l/s	240 l/min
Ultimate Vacuum	5×10 <sup>-1</sup> Pa				5×10 <sup>-1</sup> Pa				5×10 <sup>-1</sup> Pa			
	25 Microns		0.033mbar		25 Microns		0.033mbar		25 Microns		0.033mbar	
Motor	1/3 HP				1/3 HP				3/4 HP			
Rotating Speed	1440 r/min		1720 r/min		1440 r/min		1720 r/min		1440 r/min		1720 r/min	
Intake Fitting	1/4SAE				1/4SAE				1/4SAE			
Oil Capacity	250 ml				280ml				600 ml			
Dimension	315×125×240mm				340×135×260mm				390×145×280mm			
Net Weight	10 kg				11 kg				17 kg			

## VACUUM PUMPS



VP-1A



VP-1S

4.0kgs

## VP Series (1 stage)

Part No.	Voltage V/Hz	Capacity CFM	Vacuum Pa/Microns	Motor Power (HP)	Motor Speed (RPM)	Intake Fitting (inch)	Dimension (mm)	Weight (kg)	Oil Capacity (ml)
VP-0.5A	220V/50Hz	1.00	10/75	1/6	1440	1/4 SAE	240×115×230	6	160
	110V/60Hz	1.20	10/75	1/6	1720	1/4 SAE	240×115×230	6	160
VP-1A	220V/50Hz	2.00	10/75	1/6	1440	1/4 SAE	249×121×230	7.2	250
	110V/60Hz	2.40	10/75	1/6	1720	1/4 SAE	249×121×230	7.2	250
VP-1S	220V/50Hz	2.00	5/35	1/6	2800	1/4 SAE	246×105×200	4.00	150
	110V/60Hz	2.50	5/35	1/6	3360	1/4 SAE	246×105×200	4.00	150
VP-1.5A	220V/50Hz	3.00	10/75	1/4	1440	1/4 SAE	249×121×230	7.40	200
	110V/60Hz	3.60	10/75	1/4	1720	1/4 SAE	249×121×230	7.40	200
VP-2A	220V/50Hz	4.00	10/75	1/3	1440	1/4 SAE	315×125×240	8.80	250
	110V/60Hz	4.50	10/75	1/3	1720	1/4 SAE	315×125×240	8.80	250
VP-3A	220V/50Hz	5.50	10/75	1/2	1440	1/4 SAE	340×135×260	9.80	320
	110V/60Hz	6.60	10/75	1/2	1720	1/4 SAE	340×135×260	9.80	320
VP-4A	220V/50Hz	8.00	10/75	1/2	1440	1/4 SAE	390×145×280	15.50	700
	110V/60Hz	9.00	10/75	1/2	1720	1/4 SAE	390×145×280	15.50	700

## 2VP Series (2 stage)

Part No.	Voltage V/Hz	Capacity CFM	Vacuum Pa/Microns	Motor Power (HP)	Motor Speed (RPM)	Intake Fitting (inch)	Dimension (mm)	Weight (kg)	Oil Capacity (ml)
2VP-0.5C	220V/50Hz	1	5X10 <sup>-1</sup> /25	1/4	1440	1/4 SAE	249×121×230	7.0	200
	110V/60Hz	1.2	5X10 <sup>-1</sup> /25	1/4	1720	1/4 SAE	249×121×230	7.0	200
2VP-1C	220V/50Hz	2	5X10 <sup>-1</sup> /25	1/3	1440	1/4 SAE	315×125×240	9.0	250
	110V/60Hz	2.5	5X10 <sup>-1</sup> /25	1/3	1720	1/4 SAE	315×125×240	9.0	250
2VP-2C	220V/50Hz	4	5X10 <sup>-1</sup> /25	1/2	1440	1/4 SAE	340×135×260	10.0	280
	110V/60Hz	5	5X10 <sup>-1</sup> /25	1/2	1720	1/4 SAE	340×135×260	10.0	280
2VP-3C	220V/50Hz	6	5X10 <sup>-1</sup> /25	3/4	1440	1/4 SAE	390×145×280	16.00	600
	110V/60Hz	7	5X10 <sup>-1</sup> /25	3/4	1720	1/4 SAE	390×145×280	16.00	600
2VP-4C	220V/50Hz	8	5X10 <sup>-1</sup> /25	3/4	1440	1/4 SAE	425×155×280	17.00	650
	110V/60Hz	9	5X10 <sup>-1</sup> /25	3/4	1720	1/4 SAE	425×155×280	17.00	650
2VP-1S	220V/50Hz	2	3X10 <sup>-1</sup> /20	1/4	2800	1/4 SAE	246×105×200	5.30	150
	110V/60Hz	2.5	3X10 <sup>-1</sup> /20	1/4	3360	1/4 SAE	246×105×200	5.30	150
2VP-2S	220V/50Hz	4	5X10 <sup>-1</sup> /50	1/3	2880	1/4 SAE	337.5×134×225	13.10	250
	110V/60Hz	5	5X10 <sup>-1</sup> /50	1/3	3360	1/4 SAE	337.5×134×225	13.10	250

★ 2VP-1S, 2VP-2S are more lighter and faster than other items.

## COMMERCIAL SERVICE MANIFOLDS



	PRESSURE		500-2500Psi	600-3000Psi	800-4000Psi
	MODEL	HOSE			
CT-436G		3-36"	CT-436G-A	CT-436G-B	CT-436G-C
		3-60"	CT-460G-A	CT-460G-B	CT-460G-C
		3-72"	CT-472G-A	CT-472G-B	CT-472G-C
CT-436GD		3-36"	CT-436GD-A	CT-436GD-B	CT-436GD-C
		3-60"	CT-460GD-A	CT-460GD-B	CT-460GD-C
		3-72"	CT-472GD-A	CT-472GD-B	CT-472GD-C
CT-436GN		3-36"	CT-436GN-A	CT-436GN-B	CT-436GN-C
		3-60"	CT-460GN-A	CT-460GN-B	CT-460GN-C
		3-72"	CT-472GN-A	CT-472GN-B	CT-472GN-C
CT-236G		4-36"	CT-236G-A	CT-236G-B	CT-236G-C
		4-60"	CT-260G-A	CT-260G-B	CT-260G-C
		4-72"	CT-272G-A	CT-272G-B	CT-272G-C
CT-236GD		4-36"	CT-236GD-A	CT-236GD-B	CT-236GD-C
		4-60"	CT-260GD-A	CT-260GD-B	CT-260GD-C
		4-72"	CT-272GD-A	CT-272GD-B	CT-272GD-C
CT-136G		3-36"	CT-136G-A	CT-136G-B	CT-136G-C
		3-60"	CT-160G-A	CT-160G-B	CT-160G-C
		3-72"	CT-172G-A	CT-172G-B	CT-172G-C

Gauge Scales:  
 Refrigerants: All refrigerants available, max 4 different refrigerants in each gauge  
 Temperature: °C or °F  
 Pressure: Psi, Bar, Kg/cm<sup>2</sup>, mmHg, max 2 units in each gauge  
 Gauge Size/Type: 68mm or 80mm /Dry or Oil-Filled

## COMMERCIAL SERVICE MANIFOLDS



	PRESSURE		500-2500Psi	600-3000Psi	800-4000Psi
	MODEL	HOSE			
CT-536G		3-36"	CT-536G-A	CT-536G-B	CT-536G-C
		3-60"	CT-560G-A	CT-560G-B	CT-560G-C
		3-72"	CT-572G-A	CT-572G-B	CT-572G-C
CT-536GN		3-36"	CT-536GN-A	CT-536GN-B	CT-536GN-C
		3-60"	CT-560GN-A	CT-560GN-B	CT-560GN-C
		3-72"	CT-572GN-A	CT-572GN-B	CT-572GN-C
CT-636G		3-36"	CT-636G-A	CT-636G-B	CT-636G-C
		3-60"	CT-660G-A	CT-660G-B	CT-660G-C
		3-72"	CT-672G-A	CT-672G-B	CT-672G-C
CT-636GN		3-36"	CT-636GN-A	CT-636GN-B	CT-636GN-C
		3-60"	CT-660GN-A	CT-660GN-B	CT-660GN-C
		3-72"	CT-672GN-A	CT-672GN-B	CT-672GN-C
CT-636GD		3-36"	CT-636GD-A	CT-636GD-B	CT-636GD-C
		3-60"	CT-660GD-A	CT-660GD-B	CT-660GD-C
		3-72"	CT-672GD-A	CT-672GD-B	CT-672GD-C

Gauge Scales:  
 Refrigerants: All refrigerants available, max 4 different refrigerants in each gauge  
 Temperature: °C or °F  
 Pressure: Psi, Bar, Kg/cm<sup>2</sup>, mmHg, max 2 units in each gauge  
 Gauge Size/Type: 68mm or 80mm /Dry or Oil-Filled



## Charging and Recovery

### RTM-983

#### DESCRIPTION:

- CT-636GN+CT-123L+CT-525F+CT-274+CT-209+AW-1303S+Adaptors set (Packed in hand carrying aluminium case) 40cm x 30cm x 11cm
- Designed to meet air conditioning, refrigerating, and heating installation, maintenance requirements.
- This saves your time.
- It is light and portable.
- It can be customized according to customers' specific requirements.



#### DETAILS:

ITEM NO.	SPECIFICATION	QTY	REMARK
CT-636GN	MANIFOLDS, CHARGING HOSE SET	1SET	A WIDE SELECTION OF MANIFOLDS
CT-123L	RATCHET WRENCH	1PC	
	1/4", 3/16" SQUARE 9/16", 1/2" HEX RATCHET		
CT-525F	ECCENTRIC CONE TYPE FLARING TOOLS	1PC	
	FOR 3/16" TO 5/8" O.D.		
CT-274	TUBE CUTTER	1PC	
	FOR 1/8" TO 1-1/8"		
CT-209	INNER-OUTER REAMER	1PC	OR CHOOSING CT-208
	ZINC BODY, 1/4"-1-5/8" O.D. TUBING		
AW-1303S	ADJUSTABLE WRENCH	1PC	
	MAX 12"		
BN-3	Adaptor 1/4SAE*G3/4	1PC	
	Adaptor 3/8SAE*G3/4	1PC	
	Adaptor 3/8SAE*1/4SAE	1PC	

### DS-MC02 MANIFOLD GAUGE SET

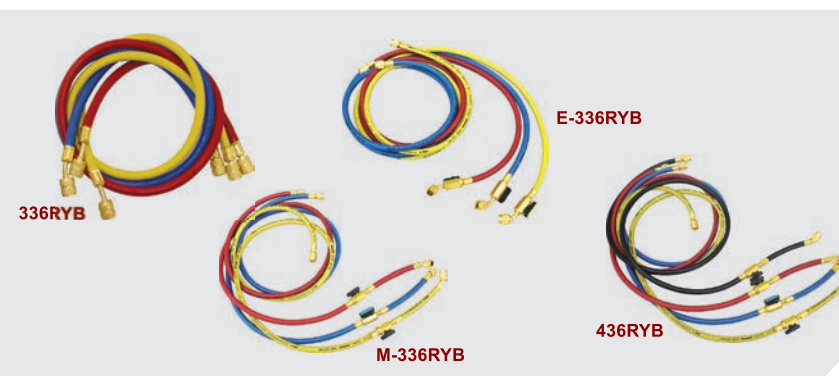


With red and blue R134a Gauges, R134a charging hose  
A/C quick coupler are available, adaptors are designed to meet  
the world wide standard for A/C service ports

## CHARGING KIT



Part No.	Description	Part No.	Description
CT-001	90° Plastic quick Coupler and Can Tap Valve (1/2 ACME)	CT-01A	Complete Kit: red blue hoses & 3pcs 90° adapters
CT-002	180° Plastic quick Coupler and Can Tap Valve (1/2 ACME)	CT-01B	Complete Kit: red blue hoses, 3pcs 90° adapters & 3pcs connector
CT-003	180° Plastic quick Coupler & 40" Gauge and Can Tap Valve (1/2 ACME)		
CT-004	90° Plastic quick Coupler & 40" Gauge and Can Tap Valve (1/2 ACME)		



	MODEL LENGTH	PRESSURE			CONNECTION
		500-2500Psi	600-3000Psi	800-4000Psi	
336RYB	3-36"	336RYB-A	336RYB-B	336RYB-C	1/4" SAE
	3-60"	360RYB-A	360RYB-B	360RYB-C	
	3-72"	372RYB-A	372RYB-B	372RYB-C	
E-336RYB	3-36"	E-336RYB-A	E-336RYB-B	E-336RYB-C	1/4" SAE
	3-60"	E-360RYB-A	E-360RYB-B	E-360RYB-C	
	3-72"	E-372RYB-A	E-372RYB-B	E-372RYB-C	
M-336RYB	3-36"	M-336RYB-A	M-336RYB-B	M-336RYB-C	1/4" SAE
	3-60"	M-360RYB-A	M-360RYB-B	M-360RYB-C	
	3-72"	M-372RYB-A	M-372RYB-B	M-372RYB-C	
436RYB	4-36"	436RYB-A	436RYB-B	436RYB-C	1/4" SAE
	4-60"	460RYB-A	460RYB-B	460RYB-C	
	4-72"	472RYB-A	472RYB-B	472RYB-C	

\*1/2" ACME or other connection size available upon customers' requirements

## GAUGE SERIES

### DIGITAL VACUUM GAUGE VA116



#### VA116

Ambient pressure: 400 psi.  
Ambient temperature: -20°C ~80°C (-4°F to 176°F)  
Moisture: 5% to 95% (±1% & 0.01%)



Part No.	DESCRIPTION
RG-250	Blue compound 30 " -0-250 PSI, class 2.5 connection bottom 1/8" NPT, 2-3/4" dia.
RG-500	Red pressure 0-500 PSI, class 2.5 connection bottom 1/8" NPT, 2-3/4" dia.
FRG-200	Blue compound 30 " -0-200 PSI, connection back 1/4" SAE, 2-3/4" dia. ring for front mounting, class 2.5
FRG-500	Red pressure 0-500 PSI, connection back 1/4" SAE, 2-3/4" dia. ring for front mounting, class 2.5
250B-GF	Compound filled glycerine 30 " -0-250 PSI, class 1.6 connection back 1/8" NPT, 2-3/4" dia, stainless steel frame
500B-GF	Pressure filled glycerine 0-500 PSI, class 1.6 connection bottom 1/8" NPT, 2-3/4" dia, stainless steel frame
250-GF	Compound filled glycerine 30 " -0-250 PSI, class 1.6 connection back 1/4" SAE, 2-3/4" dia, stainless steel frame
500-GF	Pressure filled glycerine 0-500 PSI, class 1.6 connection back 1/4" SAE, 2-3/4" dia, stainless steel frame

## AUTOMOTIVE R-134a A/C COUPLERS - premium with control valve



Couplers interface with R-134a service ports. 14mm female thread or 1/4" male flare available.

- Quick, easy connect/disconnect.
- Control valve for access to systems even at working pressures.
- Integral safety sleeve holds coupler securely to service port.
- Highest flow characteristic.
- Low profile for tight applications.

ITEM	DESCRIPTION
RTM-1304A	14mm Fe, 90° high side auto coupler
RTM-1304B	14mm Fe, 90° low side auto coupler
RTM-1304C	High side x 3/8" Male flare auto coupler
RTM-1304D	Low side x 3/8" Male flare auto coupler
RTM-1305A	1/4 M.F.I., 90° high side auto coupler
RTM-1305B	1/4 M.F.I., 90° low side auto coupler
RTM-1304H	14mm Male x 1/4" Male fl.
081J	Replacement "O"-ring for 1304 Hi./1305Hi.
082K	Replacement "O"-ring for 1304 Lo./1305Lo.
083L	Replacement "O"-ring for 1304/14mm

## Automotive R-134a A/C Couplers RTM-1306



A basic R-134a service coupler with no control valve. Snaps on for instant flow Professionals should use couplers above.

ITEM	DESCRIPTION
RTM-1306A	Low side coupler w/ 1/4" flare.
RTM-1306B	High side coupler w/ 1/4" flare.
RTM-1306C	Replacement "O"-ring set (6pk).

## R-134a Snap Couplers 14mm



The snap style is designed for mechanics just starting A/C repair.

ITEM	DESCRIPTION
RTM-1307A	Low side coupler w/14MM
RTM-1307B	High side coupler w/14MM

## R-134a Snap Couplers 1/4" SAE



ITEM	DESCRIPTION
RTM-1318A	Low side coupler w/ 1/4" Flare
RTM-1318B	High side coupler w/ 1/4" Flare
RTM-1318C	Low side coupler w/ 1/2" ACME
RTM-1318D	High side coupler w/ 1/2" ACME

## 1/4" 4-IN-1 BALL VALVE TOOL for vacuum, charge, cores and recovery

- Vacuum valve. Extra 1/4" side port on VC12 to attach electronic micron vacuum gauge right at system for greater accuracy.
- Core removal access. Let you evacuate and charge through an unrestricted line for increased speed and higher vacuum.
- Core replacement.
- Recovery valve. Core removal allows recovery unit to work at maximum efficiency, speeding the recovery process.

Remove and replace Schrader cores without losing charge.



ITEM	DESCRIPTION
VC12	Vacuum/charge ball valve w/side port
VC13	Vacuum/charge valve w/o side port
VC14	Accessory set - 2 piece
VC15	Broken Schrader remover acc.
VC17	Grappler rod/nut assembly
VC18	Gasket for VC12(5 pk.)
VC19	Seal Kit includes core, cap, 4 "O"-rings, gasket

## 5/16" 4-IN-1 BALL VALVE TOOL for R-410a systems with 5/16" access ports

Similar to the 4-in-1 core tool above but with 5/16" flare fittings and for use with R-410a.

ITEM	DESCRIPTION
VC20	5/16" Vacuum/charge valve-side port
VC21	5/16" Vacuum/charge valve w/o side port
VC22	5/16" Rethread accessory
VC23	5/16" Schrader rethreader

## R-134A DELUXE VALVE CORE TOOL

**VC134****R-134a VALVE CORE REMOVER & INSTALLER**

- Fits Hi & Lo service ports with standard size valve cores.
- Built-in ball valve retains charge & allows access to A/C system.
- Excellent for replacing valve cores without discharging the system.

**VC135****R-134a VALVE CORE REMOVER & INSTALLER**

Fits Hi & Lo service ports with standard size valve cores. Built-in ball valve retains recharge & allows access to A/C system. Excellent for replacing valve cores without discharging the system. And for speeding recovery and recharging of large systems.

## REFILLABLE EXPANDABLE INJECTORS-1/4 oz/7-5ml to 2oz/6ml CAPACITY

**NT023**

Injector 1/4 to 2ounce of fluorescent dye into R12 or R134a A/C system under pressure.

**NT024**

Injector 1/4 to 2ounce of fluorescent dye into R12 or R134a A/C system under pressure.

**NJ1234**

1/4 to 1/2oz 7.5ml to 14ml in Line Automotive with R-134a Coupler

## UV DETECTION EMITTERS LIGHT

**UV26**

- True UV LED Technology
- Patented UV 26 emitters bulbs 25,000 hour bulb life
- Operate 22 hours w/3 AA batteries with normal using Works w/most common fluorescent dyes Instant On.No heat.

**UV16**

- True UV LED Technology
- Patented UV 16 emitters bulbs 25,000 hour bulb life
- Operate 22 hours w/3 AA batteries with normal using Works w/most common fluorescent dyes Instant On.No heat.

**UV03**

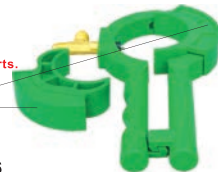
- True UV LED Technology
- Patented UV 3 emitters bulbs 25,000 hour bulb life
- Operate 45 hours w/3 AA batteries with normal using Works w/most common fluorescent dyes Instant On.No heat.

LEAK DISCOVER KITS  
CT-0702

## AUTOMOTIVE REFRIGERANT CAN TAPS

R-134a Recharge Hose Kit-screws onto 12oz can for low side charging  
Never lose inserts again!

- Permanently attached swiveling inserts. Quick change between can types.

**CT-006**

- Side can tap makes servicing A/C Systems with 12 oz. R134a & 4 oz. oil charge cans quick & easy
- Slides over R134a cans for fast & easy charging
- Adapter for A/C oil charge cans included
- Easily connects to R134a manifold gauge sets
- Brass outlet port offers a 1/2" ACME & 1/4" FL fitting with an internal check valve to prevent system backflow



R-134a 12oz refrigerant can

## COMPONENTS OF KITS:

CODE	TYPE	QUANTITY
0702-A	leak tracer lamp	1
0702-B	cleaner	12
0702-C	R134a tracer reagent	6
0702-D	R134a tracer reagent	1
0702-E	battery clip	1
0702-F	plug adapter	1
0702-G	needle charger	1
0702-H	one-side valve	1
0702-I	pipe charger	1
0702-J	tools box	1
0702-K	protectio glas	16

## RECOVERY MACHINE&amp;VACUUM PUMPS

## Recovery Machine VRR12L/24L



Parts pictorial diagram

## ★ VRR12L

One key operation, easy to use  
Equipped with high pressure protection  
Oil-less compressor  
Self-purge function  
13.5Kg only,easy to carry.

## ★ VRR24L

One key operation, easy to use  
Equipped with high, low pressure protection  
80%over filling protection  
Twin-piston, oil-less compressor, faster recovery  
Self-purge function

Refrigerants		VRR12L			VRR24L		
		Category III: R-12, R-134a, R-401c, R-500					
		Category IV : R22, R401A, R401B, R402B, R407C, R407D, R408A, R409A, R411A, R411B, R412A, R502, R509					
		Category V : R402A, R404A, R407A, R407B, R410A, R507					
Power supply		220-240VAC 50-60Hz					
Motor		3/4HP			1HP		
Motor speed		1450RPM/1750RPM					
Maximal current draw		4A			5A		
Compressor		Oil-less ,Air-cooled , Piston style					
Automatic safety Shut-off		38.5bar / 3850kPa(558psi)					
Recovery Rate		Category III	Category IV	Category V	Category III	Category IV	Category III
	Vapor	0.20kg/mni	0.25kg/mni	0.25kg/mni	0.40kg/mni	0.50kg/mni	0.50kg/mni
	Liquid	1.6kg/mni	1.80kg/mni	2.20kg/mni	3.00kg/mni	3.50kg/mni	3.50kg/mni
	Push/Pull	4.60kg/mni	5.60kg/mni	6.30kg/mni	7.50kg/mni	8.50kg/mni	9.50kg/mni
Operating temperature		0℃~40℃					
Dimensions		400mm×250mm×355mm					
Weight		13.5KG			14.8KG		



## PROGRAMMABLE REFRIGERANT CHARGING SCALE



RCS-9010/RCS-9020

### INTRODUCTION

The RCS-9010 utilize the most technologically advanced and precise refrigerant meter available today with features that can not be found anywhere else. It is ideal for HVAC and refrigeration service, including critical Charging of small refrigeration systems. With the RCS-9010 you can measure weight in both metric and English units.

The RCS-9010 is programmable, and has a built-in alarm to indicate a programmed threshold has been exceeded.

### FEATURES

- High-visibility LCD display
- Measures weight in kgs and lbs
- Built-in memory remembers all previous settings
- Rugged, compact design
- Long battery life
- High accuracy and resolution
- Programmable
- Can be calibrated in the field with inexpensive reference weight

- Battery Power Low
- OL Scale Overload
- ERR Scale Malfunction-causes include overload, moisture, damage from mistreatment

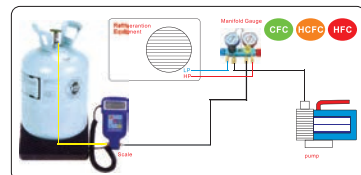
NOTE: TO prevent damage, never exceed the rated capacity of the RCS-9010/RCS-9020.



REMOVABLE PLATFORM



EXTRA LARGE CAPACITY



AUTO CHARGING REFRIGERANT

CERTIFIED: Calibrated To Standards Traceable To The National Institute Of Standards And Technology(N.I.S.T.)

ITEM	RCS-9010	RCS-9020
CAPACITY	90KGS/198 LB	100KGS / 220 LB
ACCURACY	±0.5% OF READING +/-1 LEAST	±0.5% OF READING +/-1 LEAST
RESOLUTION	0.25 OZ / 5G	0.5 OZ / 10G
PLATFORM SIZE	8-3/4" × 8-3/4" 223×223MM	8-3/4" × 8-3/4" 223×223MM
POWER	5×1.5 V ALKALINE BATTERY (7.5VDC)	5×1.5 V ALKALINE BATTERY (7.5VDC)
DIMENSIONS	23.2×23.2×5.8 CM	23.2×23.2×5.8 CM
BATTER LIFE	60 HOURS CONTINUOUS USE	60 HOURS CONTINUOUS USE
OPERATION TEMPERATURE	10°C (50F-122F)	10°C (50F-122F)
WEIGHT	2.74KG(6.03 IBS)	2.74KG(6.03 IBS)

## ELECTRONIC REFRIGERANT CHARGING SCALE



RCS-7010/RCS-7020

### INTRODUCTION

High capacity 154(220)1b/70 (100)kg Compute-A-Compute-A-Charge Refrigerant charging / recovery scale, calibrated to strict NIST standards. Fully enclosed and removable metal scale platform enables use of product in or out of the protective case. Large, highly visible 22.5mm×68mm high resolution LCD readout displays either Imperial or Metric measurements in 0.25 oz/ 10g increments. The ergonomic hand held remote incorporates a 6ft coil cord, Full mechanical and visual overload protection. Operates 30 continuous hours on two 9V alkaline batteries. Includes automatic off feature.

### Operation Instructions

1. Remove scale from case and place on a smooth flat surface.
2. Press the ON / OFF key to power the scale. The LCD should display 0.00/0.000.
3. Use the UNIT / SHIFT key to choose between Kilograms (Kg) or Pounds (Lbs)
4. When charging refrigerant, place cylinder in the center of scale (do not place a cylinder over 154(220)1b / 70(100)Kg as damage may occur to the scale!) Attach your charge hose according to generally accepted HVAC practices, bleed air from your hose , and hit the TARE key to zero out the scale.Refrigerant charge will be displayed in negative numbers.
5. When recovering refrigerant, place tank in the center of the scale. Scale will display gross weight of tank and recovered refrigerant.

- Battery Power Low
- OL Scale Overload
- ERR Scale Malfunction-causes include overload, moisture, damage from mistreatment

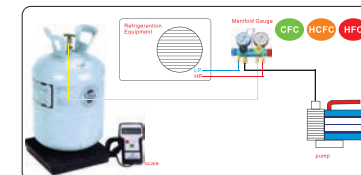
NOTE: TO prevent damage, never exceed the rated capacity of the RCS-7010/RCS-7020.



REMOVABLE PLATFORM



EXTRA LARGE CAPACITY



AUTO CHARGING REFRIGERANT

CERTIFIED: Calibrated To Standards Traceable To The National Institute Of Standards And Technology (N.I.S.T.)

ITEM	RCS-7010	RCS-7020
CAPACITY	70KGS/154 LB	100KGS/220 LB
ACCURACY	±0.5% OF READING +/-1 LEAST	±0.5% OF READING +/-1 LEAST
RESOLUTION	0.25 OZ / 5G	0.50 OZ / 10G
PLATFORM SIZE	8-3/4" × 8-3/4" 223×223MM	8-3/4" × 8-3/4" 223×223MM
POWER	9V ALKALINE BATTERY (9VDC)	5×1.5 V ALKALINE BATTERY (7.5VDC)
OPERATING TEMP	32F TO 113F (0°C TO 45°C)	32F TO 113F (0°C TO 45°C)
DIMENSIONS	23.2×23.2×5.8 CM	23.2×23.2×5.8 CM
BATTER LIFE	30 HOURS CONTINUOUS USE	30 HOURS CONTINUOUS USE
WEIGHT	2.485KG ( 5.47 OZ )	2.485KG ( 5.47 OZ )

## Halogen Leak Detectors



### SLD-100/200/300 LEAK DETECTOR

#### General descriptions:

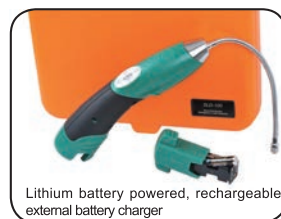
The core technology of SLD-300 refrigerant leak detector lies in the sensitivity of nano-materials to the refrigerant. It contains a nano-material semiconductor sensor to detect the halogen refrigerant. Due to the adoption of high accurate and sensitive material of sensor, SLD-300 is particularly sensitive for all refrigerant, and could successfully eliminate false signals. The sensor will neither be damaged by the big doses of refrigerant nor be reduced the sensitivity along with the usage time.

#### Main feature:

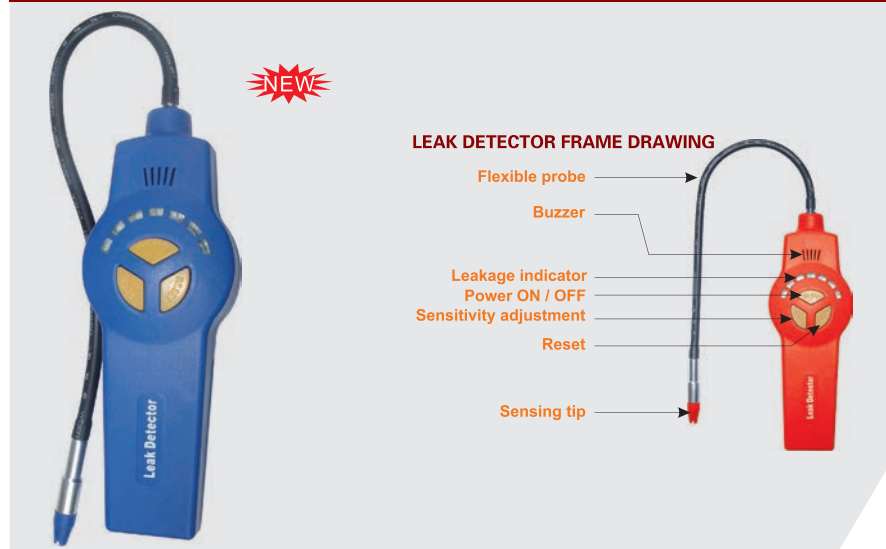
- Semiconductor sensor
- Rapid detection of refrigerant leakage points
- Extended flexible probe, sensitivity adjustable
- Low battery indicator and mute control
- Sensor fault detection alarm
- Fast warm-up, quick response time
- Audio alarm signal, and its frequency changes along the leakage density
- Visual display of seven leakage levels, with red and blue LED lights
- Lithium battery powered, rechargeable external battery charger
- High efficiency air sampling, pump could quickly response to and eliminate the gases
- Innovative and fashionable design

#### Technical parameters

- Detecting Gas: R22, R134a, R407c, R404a, R410a, R507(AZ-50) and other all CFCs, HCFCs, HFCs
- Sensitivity: 3g/yr (0.1 oz / yr) R134a
- Ambient Environment: Temperature 0°C ~ 50°C, humidity ≤ 85% RH (non condensing)
- Storage Environment: Temperature -20°C ~ 60°C, humidity ≤ 85% RH (non condensing)
- Warm up time: < 30s
- Response time: < 10s
- Display: Seven and dual-color LED indication: red indicates refrigerant leakage amount; blue indicates the sensitivity level
- Alarm: The shorter of the buzzer alarm interval, the higher of leakage density; the more of the lighted red LED, the higher of density of leakage.
- Power supply: 3.7V Li 2200mAh
- Standby time: > 4h
- Dimension: 3000mm x 65mm x 65mm



## REFRIGERANT GAS LEAK DETECTOR



### INTRODUCTION

The HLD-102 Refrigerant Gas Leak Detector is most technologically advanced of its kind. The HLD-102 low power requirements, small size and its sensitivity combine to create a tool which is easy to handle and ultra effective at locating even the most difficult-to-find leaks. Fully SAE J1627 compliant the HLD-102 will detect leaks as small as 0.1 oz / yr (3g/year) in R12, R22, R134a and other halogen refrigerant systems. HLD-102 has added useful features to enhance the usability. 1-5 levels range for real-time sensitivity cycle adjustment. 6 pieces of LED displays the leak degree in large range in the form of "gradually lights the light". And also indicates the sensitivity level. Tactile keypads make the operation more convenient.

### TECHNICAL DATA

DIMENSIONS	17CM × 6CM × 3.8CM
BATTERIES	2 × 1.5V AA ALKALINE BATTERIES (3VDC)
BATTERY LIFE	40 HOURS
SENSITIVITY	< 3G / YEAR (0.1 OZ / YR)
SENSOR LIFETIME	APPROX. 30 HOURS
OPERATION TEMPERATURE	32-122° F (0-50°C)
WARM UP TIME	< 2 SEC.
RESPONSE TIME	INSTANTANEOUS
RESET TIME	INSTANTANEOUS
PROBE LENGTH	12" (30 CM)



At this time, remove the detector and reset the sensitivity to a right level, and check it again to confirm the exact leak position.



## REFRIGERANT GAS LEAK DETECTOR



## INTRODUCTION

The HLD-201 HALOGEN leak detector adopt advanced digital circuit and micro processor control system, it's one of the most steady, sensitive products in our company. High-tech CPU core's digital signal process ability can manage circuit and process detected signal much better. More integrate circuit adopted in this product, so more than 40% electronic components had been reduced and work more effective, reliable. Micro processor detect sensing tip and power voltage at speed of 6000 time/s which can catch very feeble signal, so it make the halogen leak detector perform best sensitivity and reliability. Gradual change Sound & message alarm system indicate leak which make detector work more easy and visual able.

## PRODUCT CAPACITY:

- Adopt the most advanced digital signal process ability micro processor control system
- Built-in micro pump. Collect sample and 'ZERO' function.
- 6 level sensitivity can be set
- Voltage indicator. Auto batteries voltage test function
- Mute function
- Gradual change sound & message alarm
- Touch keyboard
- 14" (35.5cm) stainless steel flexible probe
- Cordless, easy to take. 2 'AA' batteries used
- High strength packing box protect products
- Can be used for all halogen refrigerants.



## TECHNICAL DATA

DIMENSIONS	22.9CM×6.5CM×6.5CM
BATTERIES	2×1.5V 'AA' ALKALINE BATTERIES(3VDC)
BATTERY LIFE	40 HOURS
SENSITIVITY	<3G / YEAR (0.1 OZ / YR)
SENSOR LIFETIME	APPROX. 30 HOURS
OPERATION TEMPERATURE	32-122° F(0-50°C)
WARM UP TIME	<10 SEC.
RESPONSE TIME	INSTANTANEOUS
RESET TIME	INSTANTANEOUS
PROBE LENGTH	14" (33.5 CM)

## REFRIGERANT GAS LEAK DETECTOR



## INTRODUCTION

The HLD-202 is Micro processor control with advanced digital signal collect and processing ability. 6 level single color alarm 4 key-press operation interface 6 level sensitivity real-time adjustable Fast reset and Battery voltage indicate Built-in pump Detect all halogen gas leak Maximum resolution 3 g/ ya use 2 'AA' alkaline batteries work steady and reliable.

## PRODUCT FEATURES:

- Micro processor control with advanced digital signal collect and processing ability.
- Tri-color display
- Provide maximum 64 times of 6 level sensitivity adjust
- Touch key board
- Real-time sensitivity adjust
- Battery voltage indicate
- Detect R134a, R12, R22 etc
- Detect all halogen gas leak
- Built-in pump provide positive air flow to sensing tip.
- Cordless, use 2 'AA' alkaline batteries
- 14" (35.5cm) stainless steel flexible probe

## TECHNICAL DATA

DIMENSIONS	22.9CM×6.5CM×6.5CM
BATTERIES	2×1.5V 'AA' ALKALINE BATTERIES(3VDC)
BATTERY LIFE	40 HOURS
SENSITIVITY	<3G / YEAR (0.1 OZ / YR)
SENSOR LIFETIME	APPROX. 30 HOURS

## TECHNICAL DATA

OPERATING TEMPERATURE	32-122° F(0-50°C)
WARM UP TIME	<10 SEC.
RESPONSE TIME	INSTANTANEOUS
RESET TIME	INSTANTANEOUS
PROBE LENGTH	14" (33.5 CM)

## FEATURES:

- ◆ Detects all halogenated refrigerants
- ◆ Detect once power on, no need manual-adjustment
- ◆ Vari-speed sensitivity adjustment
- ◆ Enter into the best state of detecting automatically while adjusting the sensitivity.
- ◆ Tricolor battery voltage indication
- ◆ Equipped with quality sensor, high sensitivity, 6gr/yr
- ◆ Inner precise IC with ultra-low consume circuit design, more stable, longer battery time.



## FEATURES:

- ◆ Detects all kinds of halogenated refrigerants.
- ◆ Single color LED display with 6-level leak alarm.
- ◆ Tricolor display of battery voltage.
- ◆ RESET time sensitivity adjustment.
- ◆ Real time sensitivity adjustment.
- ◆ Adopts quality sensors that can detect slightly leaked halogen gases.
- ◆ 14 inches (35.5cm) flexible stainless steel probe.



## INFRARED THERMOMETER DT-380/DT-480



LED display lights

The unit offers simple one-handed operation, laser point sighting, a backlit display, °C/°F select ability and an automatic power off feature.

## DT-380/480

Infrared Thermometer	DT-380	DT-480
Temperature Range	-50°C ~ 380°C -58°F ~ 716°F	-42°C ~ 480°C -44°F ~ 896°F
Accuracy	±2% or 2°C	±2% or 2°C
Distance Spot Ratio	8:1	10:1
Emissivity	0.95	0.95
Response Time & Wave length	500ms & (5-14)μm	500ms & (5-14)μm
Repeatability	±1% or ±1°C	±1% or ±1°C
Resolution	0.1°C or 0.1°F	0.1°C or 0.1°F
C/F Selection	Yes	Yes
Data Hold Function	Yes	Yes
Laser Target Pointer Selection	Yes	Yes
Backlight Display Selection	Yes	Yes
Auto Power Shut Off	Yes	Yes
Low Battery Indication	Yes	Yes



## TPM-400

Power voltage: 220VAC ± 10%  
Measuring range: -50°C ~ +120°C  
Product size: 79X39X22mm  
Screen size: 79 x 42mm



## TPM-900

Power voltage: 220VAC  
Measuring range: -30°C ~ +110°C  
Product size: 60 x 25.7 x 32mm  
Screen size: 64 x 31mm



## DT-2

Measuring range:  
Temperature: -50°C ~ +70°C  
Humidity: 20% ~ 99%  
Power: DC1.5V



## DT-3

Measuring range:  
In: -30°C ~ +50°C  
Out: -50°C ~ +70°C  
Temperature range: 20% ~ 99%  
Power: DC1.5V



## MT-2

Measuring range:  
Temperature: -5°C ~ +70°C  
Humidity: 30% ~ 90%  
Power: DC1.5V, Ag13

## DIGITAL THERMOMETER



## ST-1

-50°C ~ +70°C  
Resolution: > -20°C is 0.1  
≤ -20°C is 1  
Accuracy: ±1°C



## ST-3

-50°C ~ +70°C (-58°F ~ +158°F)  
Resolution: > -20°C is 0.1  
≤ -20°C is 1  
Accuracy: ±1°C (±2°F)



## TPM-10

-50°C ~ +70°C  
two batteries (AG13, 1.5V)



## T-09A/B/C

T-09A: -50 ~ 120°C  
T-09B: -50 ~ 150°C  
T-09C: -50 ~ 200°C  
Resolution: 0.1°C  
Accuracy: 0 ~ 100°C ± 1°C  
< 0°C > 100°C ± 2.0°C



## T-09G

-50°C ~ 300°C (-58°F ~ 572°F)  
Resolution: 0.1°C/°F  
Accuracy: ±1°C or ± 2°F (at 0.0°C ~ 80°C);  
± 2°C or ± 4°F (at -50°C ~ 0.0°C, 80°C ~ 125°C);  
± 3°C or ± 4°F (at 125°C ~ 200°C);  
± 4°C or ± 4°F (at 200°C ~ 300°C)



## T-09F

-50°C ~ 200°C (-58°F ~ 572°F)  
Resolution: 0.1°C/°F  
Accuracy: ±1°C or ± 2°F (at 0.0°C ~ 80°C);  
± 2°C or ± 4°F (at -50°C ~ 0.0°C, 80°C ~ 125°C);  
± 3°C or ± 4°F (at 125°C ~ 200°C)



## WT-1

-50°C ~ +300°C (-58°F ~ +572°F)  
Resolution: 0.1, > 200°C is 1 (> 400°F is 1 °F)  
Accuracy: ±1°C



## WT-2

-50°C ~ +300°C (-58°F ~ +572°F)  
Resolution: 0.1, > 200°C: 1  
Accuracy: ±1°C (-20°C ~ +80°C)  
± 5°C (other range)



## PT1005

-40°C ~ +70°C  
-40°F ~ +160 °F



## MT-1

-50°C ~ +70°C  
DC1.5V, Ag13



## ST50

-40 ~ +150°C or -40 ~ 270°F,  
2" (50mm) dial, 48" cable  
back-up lithium battery,  
solar powered



## RF221

2-1/2", capillary:  
48", -40 ~ +60°F / -40 ~ +15°C,  
stainless steel frame

## Refrigeration Thermometer

Part No.	Diameter (mm)	Cap.Length (mm)	Measuring range
60D1.5	60	1500	
80D1.5	80	1500	-40°C ~ +40°C
100D1.5	100	1500	



## 60D1.5